

REFERENCES

- [1] M. R. Cox, *Cinderella: Three hundred and forty-five variants of Cinderella, Catskin, and Cap o'Rushes*. No. 31, Folk-lore Society, 1893.
- [2] Tim Berners-Lee, “The WorldWideWeb Browser.” <https://www.w3.org/People/Berners-Lee/WorldWideWeb.html>, 1990.
- [3] A. Guha, C. Saftoiu, and S. Krishnamurthi, “The Essence of JavaScript,” in *ECOOOP 2010 - Object-Oriented Programming*, vol. 6183, pp. 126–150, 2010.
- [4] M. Mulazzani, P. Reschl, M. Huber, M. Leithner, S. Schrittwieser, E. Weippl, and F. Wien, “Fast and Reliable Browser Identification With Javascript Engine Fingerprinting,” in *Web 2.0 Workshop on Security and Privacy (W2SP)*, vol. 5, p. 4, Citeseer, 2013.
- [5] D. Yu, A. Chander, N. Islam, and I. Serikov, “JavaScript Instrumentation for Browser Security,” in *Proceedings of the 34th ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages, POPL*, pp. 237–249, 2007.
- [6] Y. Ko, T. Rezk, and M. Serrano, “SecureJS Compiler: Portable Memory Isolation in JavaScript,” in *SAC ’21: The 36th ACM/SIGAPP Symposium on Applied Computing*, pp. 1265–1274, 2021.
- [7] A. Haas, A. Rossberg, D. L. Schuff, B. L. Titzer, M. Holman, D. Gohman, L. Wagner, A. Zakai, and J. F. Bastien, “Bringing the Web Up to Speed With WebAssembly,” in *Proceedings of the 38th ACM SIGPLAN Conference on Programming Language Design and Implementation, PLDI 2017, Barcelona, Spain, June 18-23, 2017*, pp. 185–200, 2017.
- [8] C. Watt, “Mechanising and Verifying the WebAssembly Specification,” in *Proceedings of the 7th ACM SIGPLAN International Conference on Certified Programs and Proofs, CPP*, pp. 53–65, 2018.
- [9] S. Narayan, T. Garfinkel, S. Lerner, H. Shacham, and D. Stefan, “Gobi: WebAssembly as a Practical Path to Library Sandboxing,” *CoRR*, vol. abs/1912.02285, 2019.
- [10] P. Mendki, “Evaluating Webassembly Enabled Serverless Approach for Edge Computing,” in *2020 IEEE Cloud Summit*, pp. 161–166, 2020.
- [11] M. Jacobsson and J. Willén, “Virtual Machine Execution for Wearables Based on WebAssembly,” in *13th EAI International Conference on Body Area Networks, BODYNETS*, pp. 381–389, 2018.

- [12] J. Ménétrey, M. Pasin, P. Felber, and V. Schiavoni, “WebAssembly as a Common Layer for the Cloud-Edge Continuum,” in *Proceedings of the 2nd Workshop on Flexible Resource and Application Management on the Edge*, FRAME ’22, p. 3–8, 2022.
- [13] M. Chadha, N. Krueger, J. John, A. Jindal, M. Gerndt, and S. Benedict, “Exploring the Use of WebAssembly in HPC,” in *Proceedings of the 28th ACM SIGPLAN Annual Symposium on Principles and Practice of Parallel Programming*, PPOPP ’23, p. 92–106, 2023.
- [14] J. Cabrera-Arteaga, M. Monperrus, and B. Baudry, “Scalable Comparison of JavaScript V8 Bytecode Traces,” in *Proceedings of the 11th ACM SIGPLAN International Workshop on Virtual Machines and Intermediate Languages, VMIL at SPLASH 2019*, pp. 22–31, 2019.
- [15] NSA, “National Cyber Leap Year.” https://www.nitrd.gov/nitrdgroups/index.php?title=National_Cyber_Leap_Year, 2021.
- [16] G. Goth, “Addressing the Monoculture,” *IEEE Security & Privacy*, vol. 1, no. 06, pp. 8–10, 2003.
- [17] M. N. Hoque and K. A. Harras, “WebAssembly for Edge Computing: Potential and Challenges,” *IEEE Communications Standards Magazine*, vol. 6, no. 4, pp. 68–73, 2022.
- [18] T. Rokicki, C. Maurice, M. Botvinnik, and Y. Oren, “Port Contention Goes Portable: Port Contention Side Channels in Web Browsers,” in *ASIA CCS ’22: ACM Asia Conference on Computer and Communications Security*, pp. 1182–1194, 2022.
- [19] S. Song, S. Park, and D. Kwon, “metaSafer: A Technique to Detect Heap Metadata Corruption in WebAssembly,” *IEEE Access*, vol. 11, pp. 124887–124898, 2023.
- [20] D. Lehmann, J. Kinder, and M. Pradel, “Everything Old is New Again: Binary Security of WebAssembly,” in *29th USENIX Security Symposium*, pp. 217–234, 2020.
- [21] Q. Stiévenart, C. D. Roover, and M. Ghafari, “Security Risks of Porting C Programs to Webassembly,” in *SAC ’22: The 37th ACM/SIGAPP Symposium on Applied Computing*, pp. 1713–1722, 2022.
- [22] D. Genkin, L. Pachmanov, E. Tromer, and Y. Yarom, “Drive-by Key-extraction Cache Attacks from Portable Code,” *IACR Cryptol. ePrint Arch.*, p. 119, 2018.